



Five Steps to Elevate Energy Management at Your Organization

October 11th , 2016

Our agenda today

- Introduction: Who is EnerNOC
- Demand Response: Revenue to Expand your Energy Programs
- Background: The Unified Approach to Energy Transformation
- Linking Energy Management to Key Business Outcomes
- Five Steps to Elevate Your Organization
- Takeaways

About EnerNOC



Proven Customer Track Record

- 1,100+ software subscription customers
- US \$1 billion+ in customer payments/savings to date
- Market leader in demand response

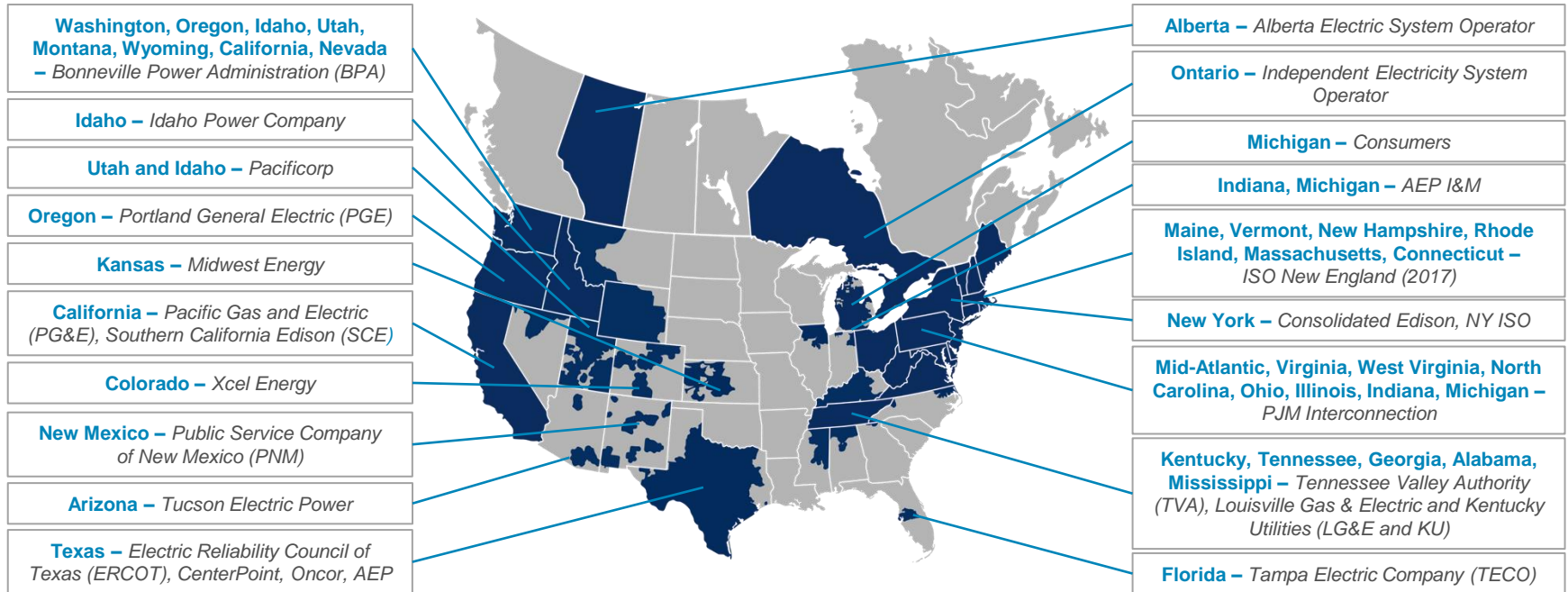
Full Value and Technology Offering

- Energy intelligence platform and applications
- Combines technology, professional services, and market access
- More than US \$200 million invested to date in technology
- 24x7x365 Network Operations Center & customer support

World Class Team and Resources

- US \$400M revenue in 2015
- US \$104M cash and cash equivalents on balance sheet
- Present in 100+ countries
- Offices in 12 countries
- More than 1,300 employees
- Publicly traded on the US NASDAQ (ENOC) exchange

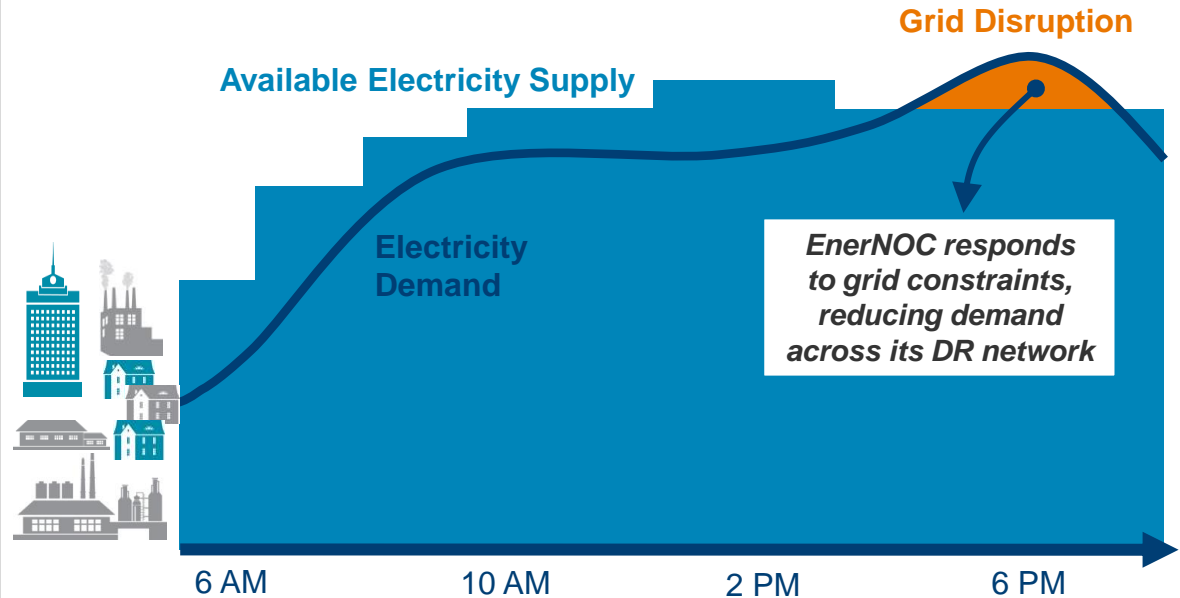
EnerNOC DR Footprint in North America



What is Demand Response (DR)?

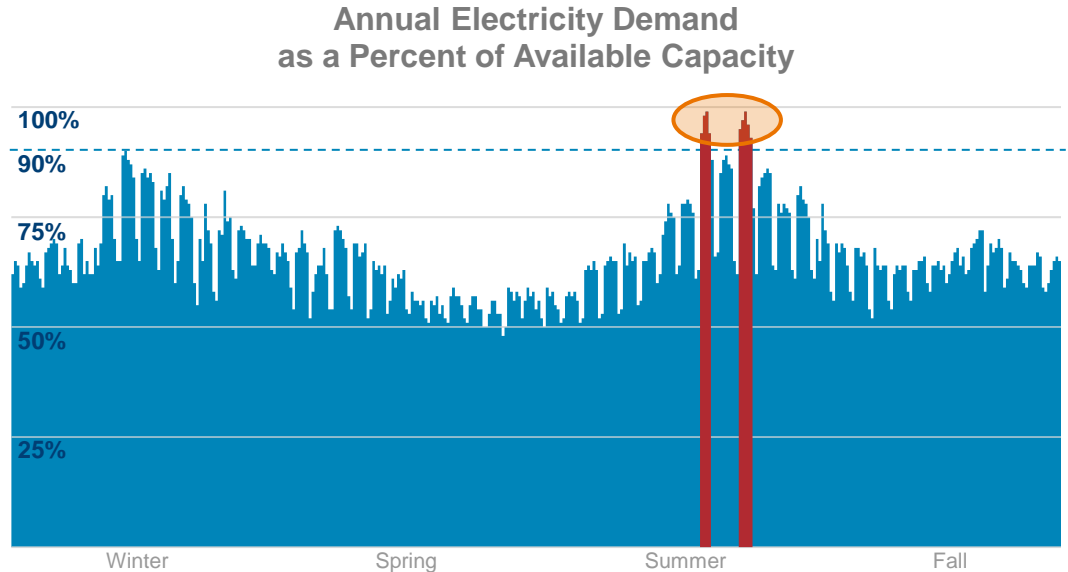
DR pays companies to reduce energy use in response to constraints that could threaten grid stability

- Balancing supply and demand on the electricity grid is difficult and expensive.
- Curtailing usage during grid emergencies is a cost-effective alternative to building more power plants.
- Grid constraints can be due to extreme weather, wholesale price spikes, or unexpected system issues.



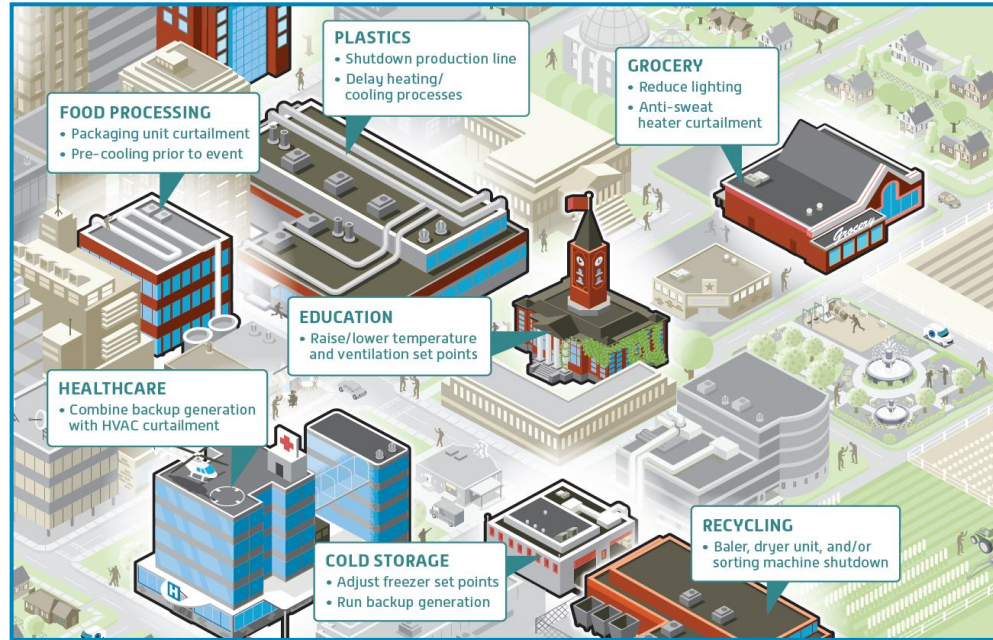
The Value of Demand Response

- More than 10% of grid infrastructure costs are spent to meet peak demand that occurs less than 1% of the time.
- Building a new power plant for that 1% of the time is incredibly expensive.
- Demand response is a fast and cost-effective way to meet peak electric demand.

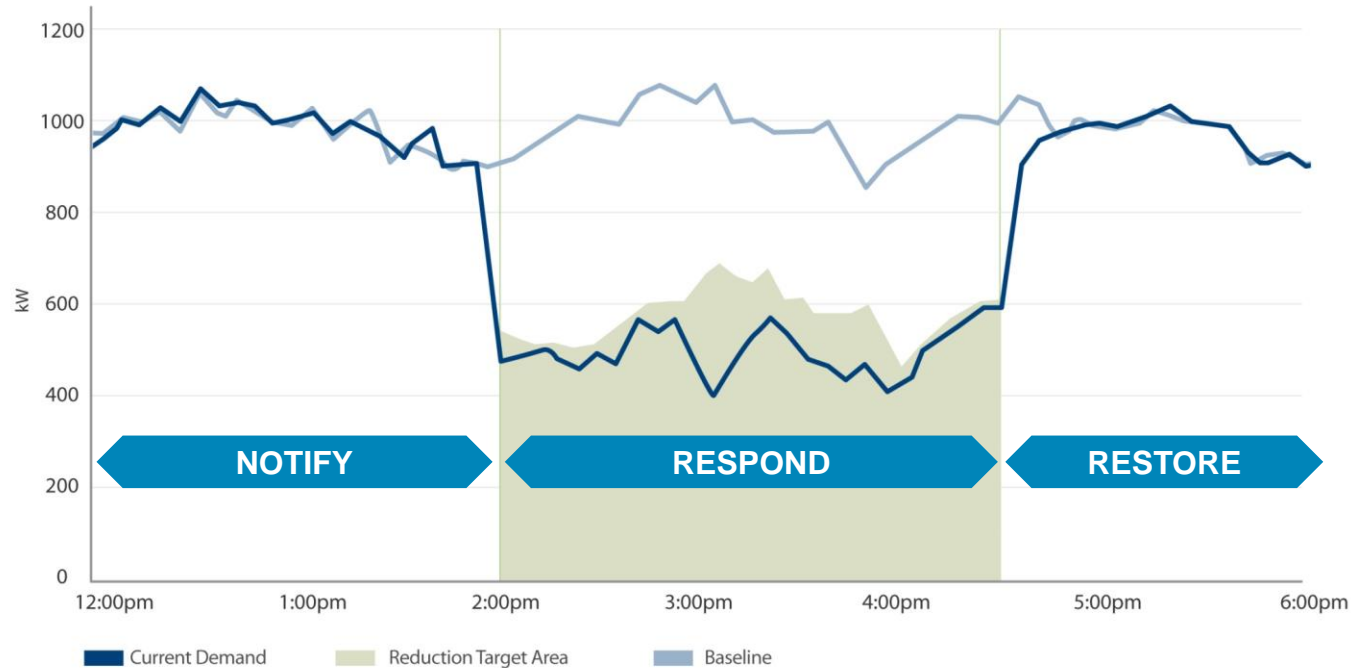


How Demand Response Works

When the electric grid needs resources, EnerNOC “dispatches” resources and thousands of facilities across nearly every industry reduce electricity consumption.



How Demand Response Events Work



Robust Energy Profiling

Plot and profile up to 3 energy data points for up to 3 sites



TVA Program Success for WTP/WWTP

ACTIVE PARTICIPATION

- Over 60 sites Participating
- Several million dollars earned!!

SOLUTION

- Use natural gas generation to remove load
- Use system storage to curtail pumps
- Lower set points to delay/slow pumping
- Increase system storage during off peak hours
- Curtail aerators
- Curtail plant lighting and air handling

IMPACT

- Additional Plant Revenue
- Improved turnover rates
- Reduced energy consumption and increased sustainability

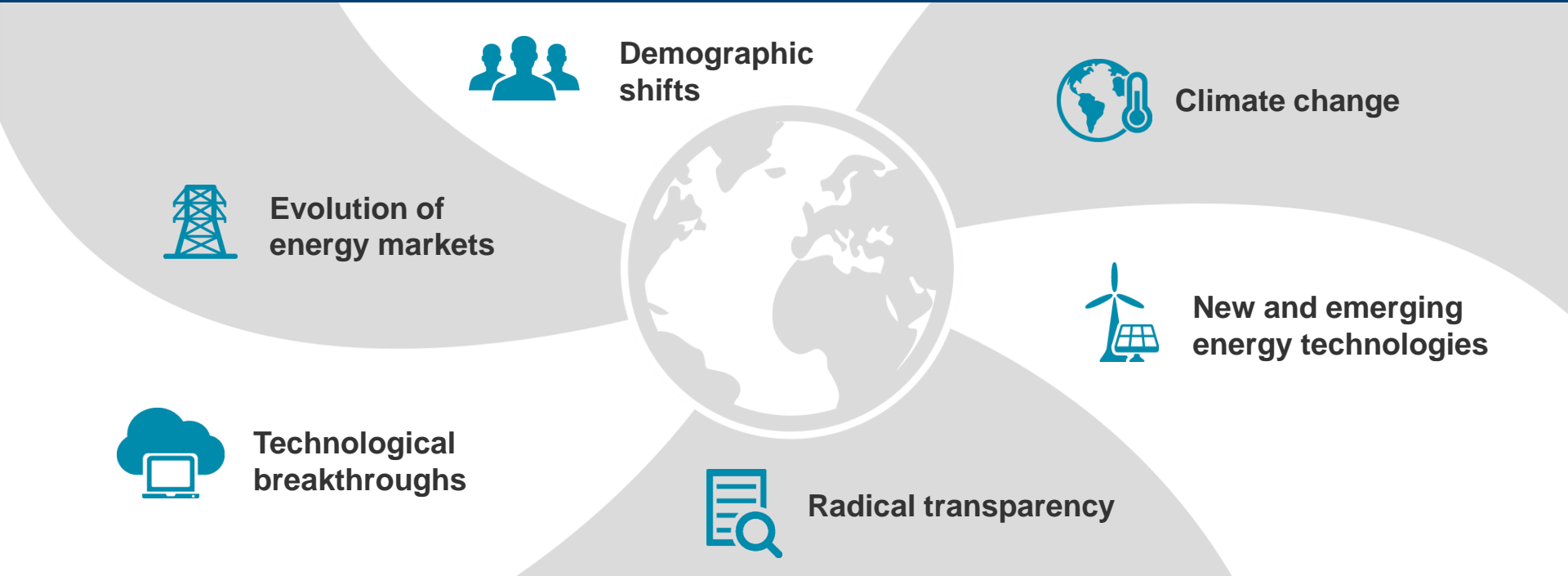
The Unified Approach to Energy Management

- We can not solve our problems with the same level of thinking that created them.
 - Albert Einstein




Energy is the largest unmanaged expense

New forces are changing the business landscape



Grappling with an energy world in transition

SUNPOWER[®] WINSTON ECO-STRATEGIES  Boston Properties

 goby  starwood
Hotels and
Resorts  WeSpire  EPA

 ENERNOC




pwc



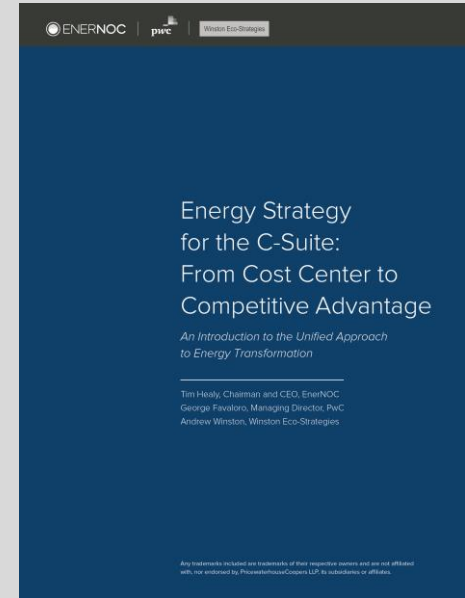
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HARVARD
BUSINESS SCHOOL



 EATON



Corporate energy management needs to evolve across four focus areas

Integrate

energy management into the fabric of your business

Elevate

Business performance using energy intelligence

Capitalize

on new technologies and market choices

Promote

your efforts and celebrate success

- Develop **a global energy strategy**, with **C-suite and cross-functional accountability**, to enable high-quality decision making
- Set ambitious, comprehensive, time-bound, **science-based goals**
- Connect **consumption** activities and **procurement** strategy to manage total energy costs
- Incorporate energy into your **risk management, resilience, and capital strategy**
- Use energy as a **keystone metric**, a primary business success indicator that aligns your organization

Integrate

Integrate energy management into the company's fabric

- Track energy data at the enterprise level leveraging new tools, capabilities, and metrics to **tie to overall business performance** (COGS, etc.)
- Use **energy signature data** to ensure “in-spec” operation, identify opportunities to increase productivity, and drive innovation beyond energy related initiatives
- Collaborate with and engage your **value chain partners** using energy data & practices
- Develop a **reporting infrastructure** that facilitates effective reporting and proactive compliance with regulatory requirements

Elevate

Elevate business performance using energy intelligence

- Evaluate and deploy advanced **energy generation, storage and control technologies** where they can have maximum impact
- Use **advanced financing** mechanisms to expand your energy project options
- Engage in policy discussions at all levels to **influence energy market opportunities**

Capitalize

Capitalize on new technologies and market choices

- **Empower and motivate your workforce** to contribute to your energy strategy and goals
- Communicate energy and carbon commitments and accomplishments and your positive values as an organization **to drive intangible value**
- Point to your energy and carbon successes as an indicator of **superior management**

Promote

Promote your efforts and celebrate success

Let's get down to business—typical strategic outcomes

**Grow revenue
in new markets**



**Achieve cost
savings of
>\$25 MM**

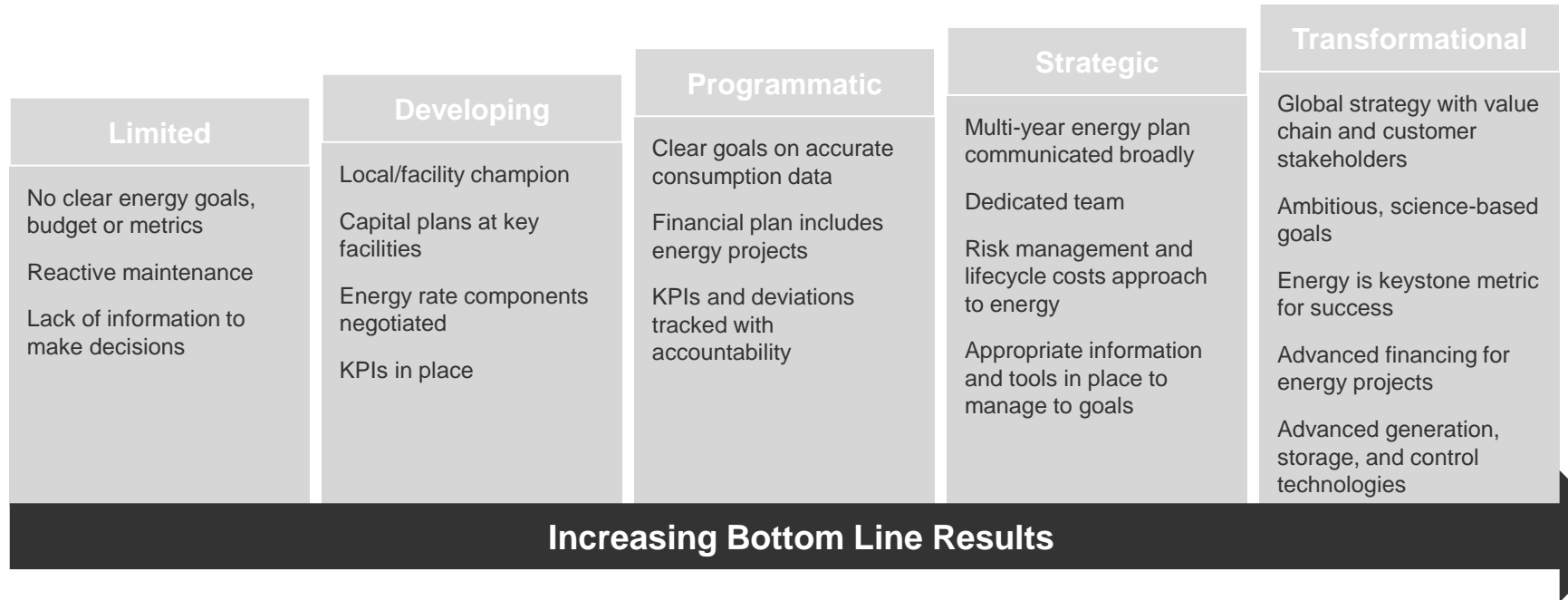


**Meet
sustainability
goals by 2020**

How well are your energy management efforts leading towards these outcomes?

Energy management maturity

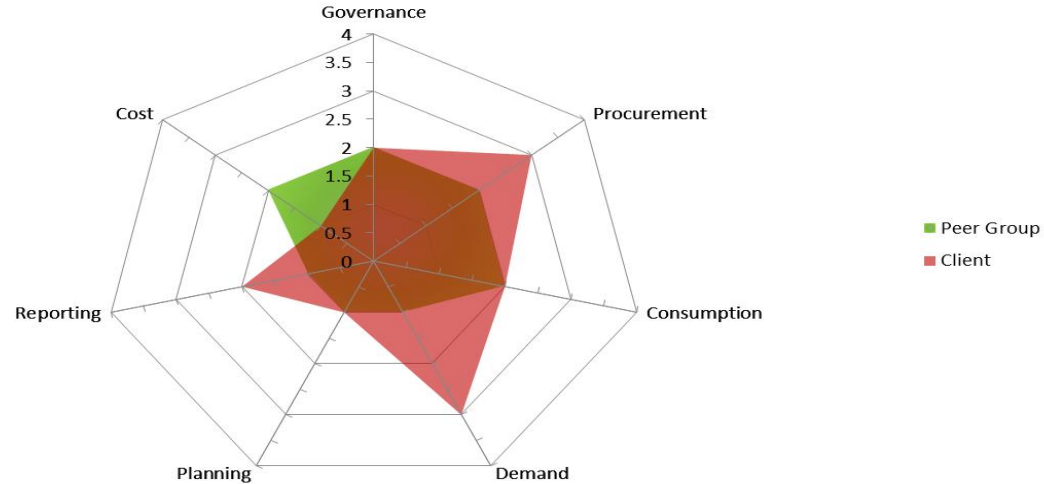
The critical issue is finding the right level to support your business outcomes



What is the optimal level for your business?

Assessment Scale

- 0 – limited
- 1 – developing
- 2 – programmatic
- 3 – strategic
- 4 - transformational



Step 1: Integrate

What does your energy team look like?

1. We don't have a team.
2. I am the team...does that count?
3. Yes, we have a team focused on sustainability, but I can't remember the last time we met.
4. We have a regularly meeting team, with a plan to reach our goal.
5. We have a corporate team that reports to the C-suite and coordinates local facility teams.

Step 2: Elevate

What do you do with energy metrics?

1. My what?
2. We track consumption from our monthly energy bills.
3. We monitor our energy metrics in our energy intelligence software.
4. We have clear accountabilities around who watches our metrics, what action we take when they deviate, and how we escalate.
5. Members of our executive team have energy performance goals; the executive team gets a regular report on leading and trailing KPIs.

Step 3: Capitalize

How do you identify O&M opportunities and then strategically prioritize and plan each one?

1. You lost me at strategically.
2. We respond to opportunities identified by audits.
3. We proactively seek out O&M opportunities.
4. We develop multi-year energy plans and evaluate projects with multiple factors beyond Simple Pay Back.
5. Energy is baked into our continuous improvement program and our CapEx models include life-cycle costs and risk.

Step 4: Promote

What are your employee engagement strategies for energy?

1. We need to work on that.
2. We put “shut ’em off” stickers on light switches.
3. We ask our employees for efficiency suggestions and then follow-up with acknowledgement or awards.
4. We target specific behaviors and deploy customized messaging to the right people.
5. We’ve built energy commitments into our core culture, and use behavioral science in our engagement program.

Step 5: Bring it all together in a roadmap

- What do you need to do?
- What's the right order and timeline?
- Who participates in the process?

The roadmap is a systematic, high-level plan

	Time Period 1	Time Period 2	Time Period 3
Integrate			
Elevate			
Capitalize			
Promote			

Roadmap example from a customer

		End 2016	Mid 2017	End 2017
Integrate	Policy and goals	Create energy targets for each facility	Add energy to corporate mission and values statement	Set stretch, multi-year energy goal for corporation
Elevate	Metrics and action	Add energy dashboard to weekly operations reviews	Improve energy dashboard with follow-up action logs	Add rigor to verification of energy savings
Capitalize	Planning	Get energy added to CapEx budget process (at facility level)	Add Corp Energy Manager to CapEx process for sign-off before exec review	Centralize energy project planning to ensure goals are met
Promote	Information flow and engagement	Add energy topic to facility daily meetings	Add energy topic to shift-change meetings	Initiate inter-facility competition

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The roadmap is a management tool

		End 2016	Mid 2017	End 2017
Integrate	Policy and goals			
Elevate	Metrics and action			
Capitalize	Planning			
Promote	Information flow and engagement			



Tasks



Synergies



Risks



Action Plan

- Action
- Owner
- Date
- Status

Takeaways



Questions?

Dale Merritt

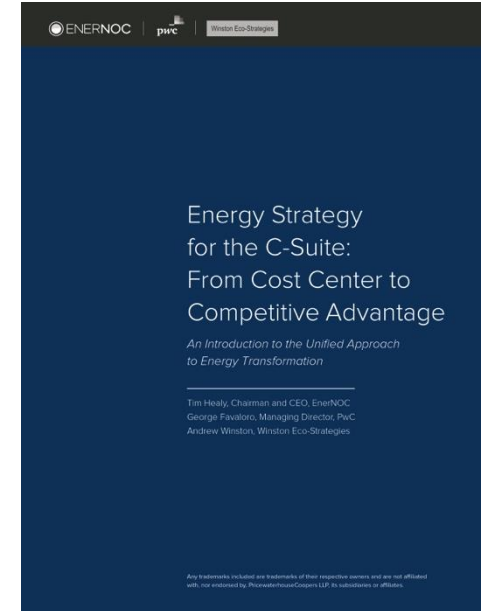
Regional Manager

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Energy Strategy for the C-Suite: From Cost Center to Competitive Advantage

Learn more and download the
strategy brief at

www.enernoc.com/unified-approach-energy-transformation



Appendix